



# Inspection - Automatic Optical Inspection & X-Ray

We are a UK based subcontract electronics manufacturing partner, offering PCB assembly, box build and full turnkey, to aerospace standards.

## Our process explained:

We use a **ALD625PRO** AOI machine to inspect 100% of our SMT output for component presence, polarity, alignment, soldering quality, and workmanship defects. It provides fast, objective verification in an accurate and repeatable way, which ensures that defects are detected early and quality standards are consistently met. We run a first off of every SMT build through the AOI for programming and validation prior to build.

We have an on-site **Nikon XTV 160** X-Ray machine which is used to verify solder joint integrity and internal component quality. It allows us to see inside packages and solder connections that are invisible to optical inspection, making it essential for inspecting components such as BGAs, QFNs. It also has CT Scanning inspection. We are able to create custom X-Ray programs for consistent part inspection.

## WHY CHOOSE US?

- ✓ UK manufacturer based in Poole
- ✓ Est. in 1982, wealth of experience
- ✓ From prototype to large volume
- ✓ Design for manufacture support
- ✓ PCB assembly and full box build
- ✓ AS9100 & ISO9001:2015 standard
- ✓ Procured & free issue materials

## WE ALSO OFFER:

- ✓ Surface Mount Placement
- ✓ Through Hole Soldering
- ✓ Full Box Build & Cable Assembly & Test
- ✓ Potting & Conformal Coating
- ✓ 5, 10 & 15 day assembly leadtimes

## Our specification:

### AOI - ALD625PRO

- Fully customisable profiles and offline programming
- Board dimensions Min 50 × 50mm to Max 430 × 330mm
- Board thickness Min 0.3mm to Max 10mm
- PCB component height up to 50mm
- First off inspection carried out on all assemblies

### X-Ray & CT Scanner - Nikon XTV 160

- XRAY Spec: Xray spot size 1um
- Defect recognition capability: 500nm
- System magnification up to 36,000x
- Power rating of kV 160 kV



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